

## PROJECT DESCRIPTION

### GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE REPLACEMENT OF PRESENCE AND SET BACK DETECTION ON MD 108 EASTBOUND AND HOWARD HIGH EXIT SOUTHBOUND AT THE INTERSECTION OF MD 108 (OLD ANNAPOLIS ROAD) AND THE WEST EXIT FROM HOWARD HIGH SCHOOL IN HOWARD COUNTY, MD 108 WILL BE WIDENED TO PROVIDE A CONTINUOUS AUXILIARY RIGHT TURN LANE IN THE WESTBOUND DIRECTION ON MD 108 BETWEEN THE INTERSECTIONS OF PHELPS LUCK DRIVE/ CENTRE PARK DRIVE AND THE WEST EXIT FROM HOWARD HIGH SCHOOL. APS AND COUNTDOWN LED PEDESTRIAN SIGNAL HEADS WILL ALSO BE INSTALLED ALONG THE EAST LEG OF MD 108 AND THE NORTH LEG OF THE WEST EXIT FROM HOWARD HIGH SCHOOL. ALL EXISTING TRAFFIC SIGNAL HEADS WILL REMAIN. MD 108 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

### INTERSECTION OPERATION

THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA THREE-PHASE, FULL-TRAFFIC-ACTUATED MODE. THE SIDE STREET ALTERNATIVE PHASE WILL REMAIN AND A CONCURRENT MAINLINE PEDESTRIAN PHASE WILL BE ADDED.

### CONTROLLER REQUIREMENTS

THE EXISTING POLE MOUNTED CONTROLLER, LOOP DETECTOR AMPLIFIERS, AND ASSOCIATED HARNESSSES SHALL REMAIN. A 2-WIRE CENTRAL CONTROL UNIT SHALL BE INSTALLED.

THE CONTACT PERSONS FOR DISTRICT #7 ARE AS FOLLOWS:

Mr. John Concannon  
Assistant District Engineer - Traffic  
Phone: 301-624-8140

Ms. Andrea Abend  
Assistant District Engineer - Utility  
Phone: 301-624-8115

Mr. Ray Johnson  
Assistant District Engineer - Maintenance  
Phone: 301-624-8105

Mr. Richard L. Daff Sr.  
Chief, Traffic Operations Division  
Phone: 410-787-7630

Mr. Edward Rodenhizer  
Chief, SHA Signal Shop  
Phone: 410-787-7652

The Power Company Representative is:  
Baltimore Gas and Electric Company  
7317 Parkway Drive South  
Hanover, MD 21076  
Phone: 410-859-9062

Colonial Pipeline Company  
Phone: 1-800-926-2728

## EQUIPMENT LIST 'A'

EQUIPMENT TO BE FURNISHED BY THE SHA.

ITEM NO	QUANTITY	DESCRIPTION
973023	3 SF	SHEET ALUMINUM SIGNS:
		2 EA - R10-4(1), (9 IN. X 12 IN.)
		POLE MOUNT, "PUSH BUTTON TO CROSS OLD ANNAPOLIS RD."
		2 EA - R10-4(1), (9 IN. X 12 IN.)
		POLE MOUNT, "PUSH BUTTON TO CROSS HOWARD HIGH EXIT"

## EQUIPMENT LIST 'C'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

ITEM NO	QUANTITY	DESCRIPTION
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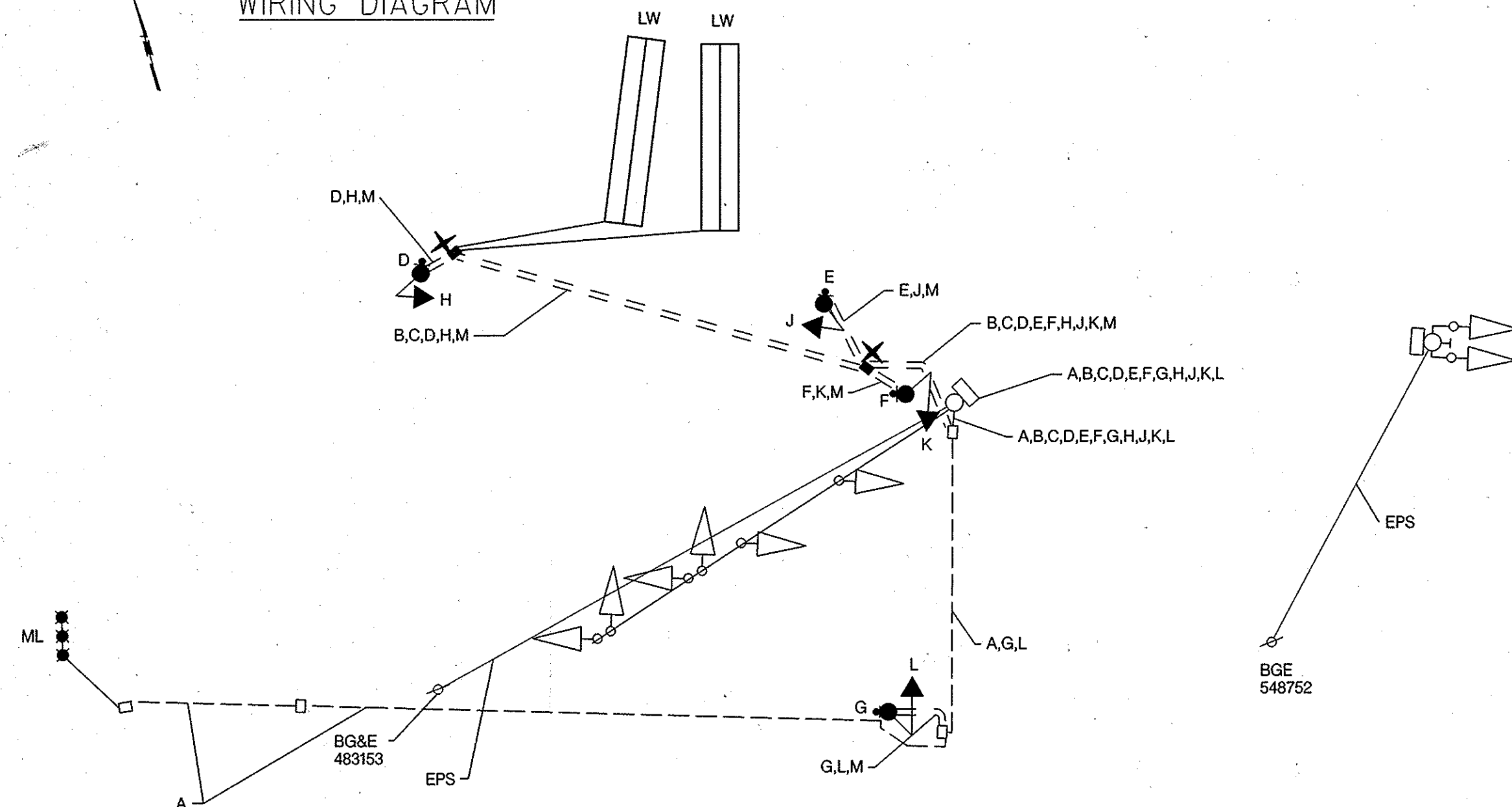
NONE - ALL REMOVED EQUIPMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR

## EQUIPMENT LIST 'B'

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

ITEM NO	QUANTITY	DESCRIPTION
203030	4 CY	TEST PIT EXCAVATION
585620	625 LF	12 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
585624	45 LF	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
655120	40 SF	DETECTABLE WARNING SURFACE
800000	1 EA	2-WIRE CENTRAL CONTROL UNIT
800000	4 EA	16 INCH LED COUNTDOWN PEDESTRIAN SIGNAL HEAD
800000	4 EA	ACCESSIBLE PEDESTRIAN PUSHBUTTON
800000	1 LS	REMOVE AND DISPOSE OF TRAFFIC SIGNAL EQUIPMENT
801004	4 CY	CONCRETE FOR SIGNAL FOUNDATION
802501	180 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
805011	35 LF	1 INCH ELECTRICAL CONDUIT - GALVANIZED SLEEVE
805135	80 LF	3 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED
805155	80 LF	4 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - SLOTTED
805160	15 LF	1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
810555	1 EA	MICROLOOP PROBE - 1000 FOOT LEAD-IN CABLE
811001	2 EA	ELECTRICAL HANDHOLE
818005	3 SF	INSTALL OVERHEAD SIGN
837001	4 EA	10 FOOT BREAKAWAY PEDESTAL POLE
860284	2 EA	GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH
861104	305 LF	ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED)
861105	320 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO.14 AWG)
861107	330 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO.14 AWG)
862101	945 LF	LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO.14 AWG)
862102	290 LF	SAW CUT FOR SIGNAL (LOOP DETECTOR)

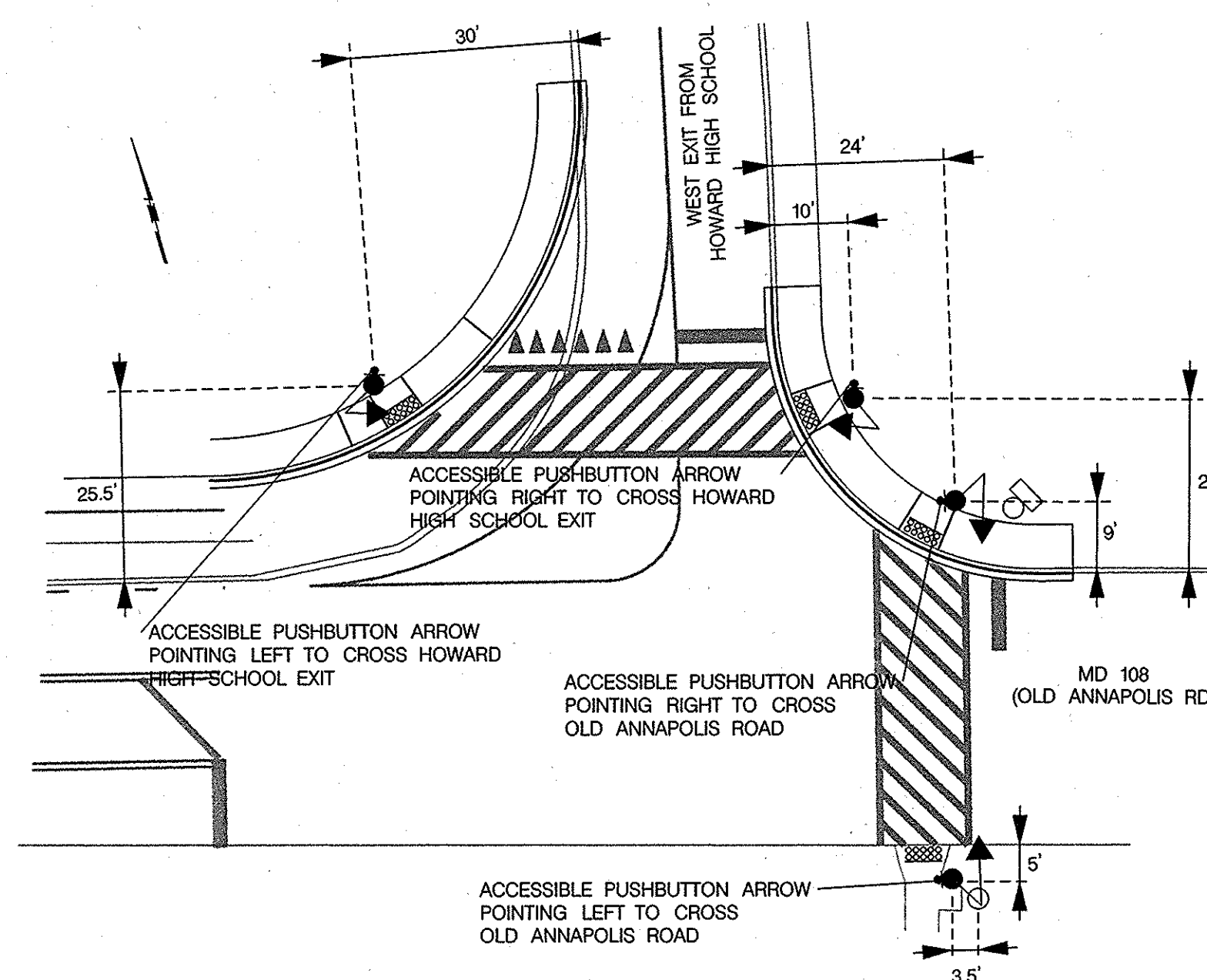
## WIRING DIAGRAM



## PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	
	○	○	○	○	○	○	○	○	○	○	○	○	
PHASE 2 & 6	G	G	FL/Y	FL/Y	G	G	R	R	W	W	DW	DW	
PHASE 2 & 6 PED. CLEARANCE	G	G	FL/Y	FL/Y	G	G	R	R	FL/DW	FL/DW	DW	DW	
PHASE 2 & 6 CHANGE	Y	Y	FL/Y	FL/Y	Y	R	R	R	DW	DW	DW	DW	
PHASE 4	R	R	FL/Y	FL/Y	R	R	G	G	DW	DW	DW	DW	
PHASE 4 CHANGE	R	R	FL/Y	FL/Y	R	R	Y	Y	DW	DW	DW	DW	
PHASE 4 ALT.	R	R	FL/Y	FL/Y	R	R	G	G	DW	DW	W	W	
PHASE 4 ALT. PED. CLEARANCE	R	R	FL/Y	FL/Y	R	R	G	G	DW	DW	FL/DW	FL/DW	
PHASE 4 ALT. CHANGE	R	R	FL/Y	FL/Y	R	R	Y	Y	DW	DW	DW	DW	
FLASHING OPERATION	FL/Y	FL/Y	DARK	DARK	FL/Y	FL/Y	FL/R	FL/R	DARK	DARK	DARK	DARK	

## PROPOSED PEDESTAL POLE AND APS DETAIL LAYOUT



- A - MICROLOOP PROBE, 1000 FOOT LEAD-IN CABLE
- B - ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED)
- C - ELECTRICAL CABLE - 2 CONDUCTOR (NO.14 AWG)
- D - ELECTRICAL CABLE - 2 CONDUCTOR (NO.14 AWG)
- E - ELECTRICAL CABLE - 5 CONDUCTOR (NO.14 AWG)
- F - NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
- G - LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO.14 AWG)
- H - MICROLOOP PROBE SET
- I - EXISTING POWER SOURCE
- J - PROPOSED GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH.

**STV Incorporated**

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**SHA** STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
MD 108 (OLD ANNAPOLIS ROAD) AND  
WEST EXIT FROM HOWARD HIGH SCHOOL

## GENERAL INFORMATION

SCALE NONE DATE 5/20/06 CONTRACT NO. H03215176

DESIGNED BY MCG COUNTY HOWARD  
DRAWN BY MCG LOGMILE 13010811.79  
CHECKED BY BAB T. I. M. S. NO. H157  
F. A. P. NO. TOD NO.

DRAWING NO. TS-3249B-GI OF SHEET NO. 12 OF 12

PLOTTED: FRIDAY, JUNE 15, 2006 AT 01:34 PM  
FILE: L:\PROJECTS\0312513\0312513.0018\DRAWINGS\TRA\INSERT\HHS\FSC-P001.MD108.DGN